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(54) Title: NEISSERIAL ANTIGENIC PEPTIDES

(57) Abstract: This invention provides, among other things, proteins, polypeptides, and fragments thereof, derived from the bacteria *Neisseria meningitidis* B. Also provided are nucleic acids encoding for such proteins, polypeptides, and/or fragments, as well as nucleic acids complementary thereto *e.g.*, antisense nucleic acids). Additionally, this invention provides antibodies which bind to the proteins, polypeptides, and/or fragments. This invention further provides expression vectors useful for making the proteins, polypeptides, and/or fragments, as well as host cells transformed with such vectors. This invention also provides compositions of the proteins, polypeptides, fragments, and/or nucleic acids, for use as vaccines, diagnostic reagents, immunogenic compositions, and the like. Methods of making the compositions and methods of treatment with the compositions are also provided. This invention also provides methods of detecting the proteins, polypeptides, fragments, and/or nucleic acids.

-725-

150-AlaGlyLeuGluLeuIleArgLysLeuGlyGlyGluIle-162
165-AlaAlaAlaIleLeuGluPheThrAspLeuGlnGlyGlyLysAsnIleArg-181

Antigenic Index - Jameson-Wolf

4-LysThrSerAsnLeu-8
24-LeuAlaAspLysIleArgLysIleGluAsnTrpProGlnLysGly-38
66-MetAspGlnLysIleAspIle-72
76-LeuAspAlaArgGly-80
97-ProIleArgLysLysGlyLysLeuPro-105
117-TyrGlyGluAlaAlaVal-122
124-IleHisThrAspAlaValLysProGlySerArg-134
153-GluLeuIleArgLysLeuGlyGlyGluIleValGlu-164
172-ThrAspLeuGlnGlyGlyLysAsnIleArgAlaSerGlyAlaPro-186
192-GlnAsnGluGlyCysMetLysGly-199

Hydrophilic Regions - Hopp-Woods

24-LeuAlaAspLysIleArgLysIleGluAsnTrpPro-35
66-MetAspGlnLysIleAspIle-72
97-ProIleArgLysLysGlyLysLeuPro-105
117-TyrGlyGluAlaAlaVal-122
124-IleHisThrAspAlaValLysProGlySer-133
153-GluLeuIleArgLysLeuGlyGlyGluIleValGlu-164
178-LysAsnIleArgAlaSerGly-184
195-GlyCysMetLysGly-199

g149**AMPHI Regions - AMPHI**

72-AsnLeuGlyAspAlaLeuAspGlyValProGlyIle-83
101-ThrGlyArgArgIleLysValLeuAsnHisHisGlyGluThrGlyAspMet-117
135-GlnValGluIleLeuArgGlyProValThr-144
152-ValAlaGlyLeuValAsp-157
164-ProGluLysMetProGluAsn-170
184-AsnLeuGluLysLeu-188
220-TyrArgAsnLeuLysArgLeuProAspSerHis-230
345-PheProGlyPheGlu-349
366-AlaGlyAspAlaValGluAsnPhePheAsnAsn-376
389-ProIleGlyArgLeuLys-394
411-AlaIleProGluThrVal-416
472-GlnProLeuProAspLeuGlyAla-479
565-ArgPheGlyAsnTyrIleTyrAlaGln-573
576-AsnAspGlyArgGlyProLysSerIleGluAsp-586
627-ArgGlyArgLeuLysAsnLeuProSer-635
672-LeuThrAspArgIle-676

Antigenic Index - Jameson-Wolf

25-HisGluThrGluGln-29
40-GlyLysSerArgProArgAlaThrSerGly-49
55-ThrAlaSerAspLysIleIleSerGlyAspThrLeuArgGlnLysAla-70
97-IleArgGlyGlnThrGlyArgArgIleLysVal-107
109-AsnHisHisGlyGluThrGlyAspMetAlaAspPheSerProAspHis-124
137-GluIleLeuArgGlyPro-142
157-AspValAlaAspGlyLysIleProGluLysMetProGluAsnGlyValSerGlyGluAlaGlyLeu-178
180-LeuSerSerGlyAsnLeuGluLysLeuThrSer-190
207-GlyLeuTyrArgLysSerGlyAspTyrAlaValProArgTyrArgAsnLeuLysArgLeuProAspSerHis
AlaAspSerGlnThrGly-236
244-GlyGluLysGlyPhe-248

221-SerAsnAlaGluLysIleAlaArgIleAsnArgAlaLysGlyGluAlaGluSerLeuArgLeu-241
245-AlaAsnAlaGluAlaIleArg-251
281-LeuAlaLysGluSerAsn-286
306-LysIleIleAspSerSerLysThrAlaLys-315
g520-1

AMPHI Regions - AMPHI

109-AspGlyGlnIleTrpArgAlaPheSerSerLeuLys-120

Antigenic Index - Jameson-Wolf

20-LysProSerArgArgAlaLeu-26
47-AlaSerGlyLysIleSerLeuPro-54
84-ProProAsnAsnSerThrThrThrSerThrSerLeuArgAlaThrSerSerAsnGlySerLeuThrLysAlaAlaAsp-109
122-HisMetAlaGluIleArgIleSerArgProLysArgArgGluIleSerSerAlaLeuSerArgAsnThrAlaAlaAlaPro-148
150-ProThrValProLysProLysArgProMet-159
166-SerProCysLysProThrGluMet-173

Hydrophilic Regions - Hopp-Woods

20-LysProSerArgArgAlaLeu-26
93-ThrSerLeuArgAlaThrSerSer-100
103-SerLeuThrLysAlaAlaAsp-109
122-HisMetAlaGluIleArgIleSerArgProLysArgArgGluIleSer-137
140-LeuSerArgAsnThrAla-145
151-ThrValProLysProLysArgProMet-159
168-CysLysProThrGluMet-173

g521**AMPHI Regions - AMPHI**

39-ThrLysProSerLysSerCys-45
50-LeuProProIleGly-54
86-ValLysThrValSerLysProAlaLysSer-95
126-AlaGlnLysMetLeu-130
132-GlnAlaArgLeuAlaLysGlyGlyAsn-140
146-IleAsnAlaLeuSerAsnValLeuAspArgGlnGlnAsnIle-159

Antigenic Index - Jameson-Wolf

1-MetLysSerLysLeu-5
36-ValTyrThrThrLysProSerLysSerCysHisSerThrAspLeuProProIleGlyAsnTyrSerSerGluArgTyrIle-62
65-GlnThrProGluProAlaProSerProSerAsnGlyGlyGln-78
80-ValLysTyrLysAlaProVal-86
88-ThrValSerLysProAlaLysSerAsnThrProProGlnGlnAlaProValAsnAsnSerArgArgSerIleLeuGluAlaGluLeuSerAsnGluArgLysAlaLeuThrGluAlaGlnLysMetLeuSer-131
134-ArgLeuAlaLysGlyGlyAsnIleAsnHisGlnLys-145
152-ValLeuAspArgGlnGlnAsn-158
162-LeuGlnArgGluLeuGlyArg-168

Hydrophilic Regions - Hopp-Woods

1-MetLysSerLysLeu-5
40-LysProSerLysSerCysHis-46
57-SerSerGluArgTyrIle-62
66-ThrProGluProAlaProSerProSerAsnGly-76
80-ValLysTyrLysAlaProVal-86
88-ThrValSerLysProAlaLysSerAsnThrPro-98